# In the Claims

Applicants have submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts.

Please amend claims 45, 46, 59, 60 and 63-65 as indicated below.

Please add new claims 66-101.

- 1. (Previously Presented) A composition comprising:
  - (a) a biotin conjugate comprising:
    - (i) a biotin covalently coupled to
    - (ii) a pharmacologically active chemokine; and
  - (b) an anti-biotin antibody selectively bound to said biotin to form a complex.

## 2.-9. (Cancelled)

- 10. (Previously Presented) The composition of claim 1, wherein the pharmacologically active chemokine has an agonist activity.
- 11. (Previously Presented) The composition of claim 1, wherein the pharmacologically active chemokine has an antagonist activity.

#### 12.-14. (Cancelled)

15. (Original) The composition of claim 1, wherein the complex has a half-life ranging from about 15 minutes to about 1 hour in the presence of supra physiological levels of biotin and an affinity constant ranging from about 1.0 to about 100.0 nanomolar.

# 16.-19. (Cancelled)

20. (Original) The composition of claim 1, wherein the anti-biotin antibody comprises a therapeutic agent that is a cytotoxic agent.

- 21. (Original) The composition of claim 1, wherein the anti-biotin antibody comprises a diagnostic agent attached thereto.
- 22. (Original) The composition of claim 1, wherein the anti-biotin antibody has a dual specificity.
- 23. (Original) The composition of claim 22, wherein the anti-biotin antibody selectively binds to a tumor cell associated antigen.
- 24. (Original) The composition of claim 22, wherein the anti-biotin antibody selectively binds to a viral associated antigen.

# 25.-33. (Cancelled)

- 34. (Previously Presented) A composition comprising:
  - (a) a biotin conjugate comprising
    - (i) a biotin covalently coupled to
    - (ii) a chemokine having a pharmacological activity; and
- (b) a pharmaceutically acceptable carrier, wherein the pharmaceutically acceptable carrier is suitable for parenteral administration.

### 35.-40. (Cancelled)

- 41. (Previously Presented) The composition of claim 1, wherein the composition is lyophilized.
- 42. (Previously Presented) The composition of claim 1, further comprising a pharmaceutically acceptable carrier.
- 43. (Previously Presented) The composition of claim 42, wherein the pharmaceutically acceptable carrier is acceptable for a mode of delivery selected from the group consisting of:

intradermal delivery, intramuscular delivery, intraperitoneal delivery, intravenous delivery, subcutaneous delivery, and controlled release delivery.

- 44. (Previously Presented) The composition of claim 1, wherein the biotin is selected from the group consisting of L-biotin, D-biotin and derivative thereof.
- 45. (Currently Amended) The composition of claim 1, wherein the chemokine is selected from the group consisting of the chemokines <u>RANTES</u>, <u>MIP-1alpha</u>, <u>MIP-1beta</u>, <u>MCP-1</u>, <u>MCP-2</u>, <u>MCP-3</u>, <u>MCP-4</u>, eotaxin, eotaxin-2, <u>TARC</u>, <u>MDC</u>, <u>MIP-3alpha</u>, <u>MIP-3beta</u>, <u>I-309</u>, <u>HCC-1</u>, <u>HCC-2</u>, <u>MIP-3</u>, <u>MIP-4</u>, <u>SLC</u>, <u>TECK</u>, <u>LEC</u>, <u>CKb-15</u>, <u>PTEC</u>, <u>IL-8</u>, <u>GROalpha</u>, <u>GRObeta</u>, <u>GROgamma</u>, <u>PF4</u>, <u>NAP-2</u>, <u>ENA-78</u>, <u>GCP2</u>, <u>IP-10</u>, <u>MIG</u>, <u>ITAC</u>, <u>MIP-2</u>, <u>CKa2</u>, <u>ADEC</u>, <u>SDF</u>, <u>fractakine and lympholactin</u> of <u>Table 1</u>.
- 46. (Currently Amended) The composition of claim 1, wherein the chemokine has a carboxyl terminus and the biotin is <del>covalent</del> <u>covalently</u> attached to the carboxyl terminus of the chemokine.
- 47. (Previously Presented) The composition of claim 1, wherein the biotin is covalently coupled to the pharmacologically active chemokine via a linker molecule.
- 48. (Previously Presented) The composition of claim 1, wherein the complex has a half-life ranging from about 15 minutes to about 1 hour in the presence of supra physiological levels of biotin.
- 49. (Previously Presented) The composition of claim 1, wherein the anti-biotin antibody has an affinity constant ranging from about 1.0 to about 100.0 nanomolar.
- 50. (Previously Presented) The composition of claim 1, wherein the anti-biotin antibody is selected from the group consisting of an intact antibody, and an antibody fragment.

- 51. (Previously Presented) The composition of claim 1, wherein the anti-biotin antibody is a human antibody or fragment thereof.
- 52. (Previously Presented) The composition of claim 1, wherein the anti-biotin antibody has a subclass selected from the group consisting of a IgG1 subclass, and an IgG3 subclass.
- 53. (Previously Presented) The composition of claim 1, wherein the anti-biotin antibody comprises a therapeutic agent attached thereto.
- 54. (Previously Presented) The composition of claim 1, wherein the complex has a half-life of from one day to one month in vivo.
- 55. (Previously Presented) The composition of claim 1, wherein the complex has a half-life of from one week to two weeks in vivo.

### 56.-58. (Cancelled)

- 59. (Currently Amended) The composition of claim 34, wherein the <del>pharmacologically</del> active chemokine <u>having a pharmacological activity</u> has an agonist activity.
- 60. (Currently Amended) The composition of claim 34, wherein the <del>pharmacologically</del> active chemokine <u>having a pharmacological activity</u> has an antagonist activity.
- 61. (Previously Presented) The composition of claim 34, wherein the composition is lyophilized.
- 62. (Previously Presented) The composition of claim 34, wherein the biotin is selected from the group consisting of L-biotin, D-biotin and derivative thereof.
- 63. (Currently Amended) The composition of claim 34, wherein the chemokine is selected from the group consisting of the chemokines RANTES, MIP-1alpha, MIP-1beta, MCP-

- 1, MCP-2, MCP-3, MCP-4, eotaxin, eotaxin-2, TARC, MDC, MIP-3alpha, MIP-3beta, I-309, HCC-1, HCC-2, MIP-3, MIP-4, SLC, TECK, LEC, CKb-15, PTEC, IL-8, GROalpha, GRObeta, GROgamma, PF4, NAP-2, ENA-78, GCP2, IP-10, MIG, ITAC, MIP-2, CKa2, ADEC, SDF, fractakine and lympholactin of Table 1.
- 64. (Currently Amended) The composition of claim 34, wherein the chemokine has a carboxyl terminus and the biotin is eovalent covalently attached to the carboxyl terminus of the chemokine.
- 65. (Currently Amended) The composition of claim 34, wherein the biotin is covalently coupled to the pharmacologically active chemokine having a pharmacological activity via a linker molecule.
  - 66. (New) The composition of claim 1, wherein the chemokine is ITAC.
  - 67. (New) The composition of claim 1, wherein the chemokine is eotaxin.
  - 68. (New) The composition of claim 1, wherein the chemokine is MDC.
  - 69. (New) The composition of claim 1, wherein the chemokine is MIP-3alpha.
  - 70. (New) The composition of claim 1, wherein the chemokine is MIP-2.
  - 71. (New) The composition of claim 1, wherein the chemokine is MIP-1beta.
  - 72. (New) The composition of claim 1, wherein the chemokine is MCP-1.
  - 73. (New) The composition of claim 1, wherein the chemokine is MIP-1alpha.
  - 74. (New) The composition of claim 1, wherein the chemokine is RANTES.

- 75. (New) The composition of claim 1, wherein the chemokine is I-309.
- 76. (New) The composition of claim 34, wherein the chemokine is ITAC.
- 77. (New) The composition of claim 34, wherein the chemokine is eotaxin.
- 78. (New) The composition of claim 34, wherein the chemokine is MDC.
- 79. (New) The composition of claim 34, wherein the chemokine is MIP-3alpha.
- 80. (New) The composition of claim 34, wherein the chemokine is MIP-2.
- 81. (New) The composition of claim 34, wherein the chemokine is MIP-1beta.
- 82. (New) The composition of claim 34, wherein the chemokine is MCP-1.
- 83. (New) The composition of claim 34, wherein the chemokine is MIP-1alpha.
- 84. (New) The composition of claim 34, wherein the chemokine is RANTES.
- 85. (New) The composition of claim 34, wherein the chemokine is I-309.
- 86. (New) The composition of claim 1, wherein the chemokine is a full-length chemokine.
- 87. (New). The composition of claim 1, wherein the chemokine is a truncated chemokine.
- 88. (New) The composition of claim 1, wherein the chemokine is an elongated chemokine.

- 89. (New) The composition of claim 87, wherein the truncated chemokine is truncated at an amino terminus.
- 90. (New) The composition of claim 87, wherein the truncated chemokine is truncated at a carboxy terminus.
- 91. (New) The composition of claim 88, wherein the elongated chemokine is elongated at an amino terminus.
- 92. (New) The composition of claim 34, wherein the chemokine is a full-length chemokine.
- 93. (New) The composition of claim 34, wherein the chemokine is a truncated chemokine.
- 94. (New) The composition of claim 34, wherein the chemokine is an elongated chemokine.
- 95. (New) The composition of claim 93, wherein the truncated chemokine is truncated at an amino terminus.
- 96. (New) The composition of claim 93, wherein the truncated chemokine is truncated at a carboxy terminus.
- 97. (New) The composition of claim 94, wherein the elongated chemokine is elongated at an amino terminus.
- 98. (New) The composition of claim 10, wherein the pharmacologically active chemokine is chemokine truncated at the carboxy terminus.

- 99. (New) The composition of claim 11, wherein the pharmacologically active chemokine is a chemokine truncated or elongated at the amino terminus.
- 100. (New) The composition of claim 59, wherein the chemokine having a pharmacological activity is a chemokine truncated at the carboxy terminus.
- 101. (New) The composition of claim 60, wherein the chemokine having a pharmacological activity is a chemokine truncated or elongated at the amino terminus.